

Effectiveness of environmental sustainability messages in tourism destinations

Abstract

This research aims at examining the effectiveness of the environmental sustainability message framing on tourists' pro-environmental behaviour. The current research employs a between-subject design experimental approach to assess the direct effect of message framing on the tourist's pro-environmental behaviour as well as the underlying mechanism behind such an effect. Hence, the study examines whether collective efficacy and brand identification mediate the relationship between message framing and the tourist's pro-environmental behaviour intentions, as well as the moderating role of the tourist's collectivism in these relationships.

Keywords: *sustainability; message framing; brand identification; collective efficacy; pro-environmental behaviour*

1.Introduction

Environmental sustainability is a global challenge that needs to be tackled through collective action (Ardoin, Bowers, and Wheaton, 2022). Due to social movement pressures, organizations endorse sustainable business practices (Uyar, Karaman, and Kilic, 2021). Within the tourism domain, for example, Spain has recently launched a ‘slow travel’ sustainability campaign to reduce the harmful impacts of tourism on the destination environment (Payne, 2022). The country allocated 683 million euros to implement its tourism sustainability plans and 143 million for digital promotions of the sustainable tourism product (Law, 2020). Likewise, social marketers seek effective communication methods to stimulate sustainable consumption behaviour (Wehrli *et al.*, 2017; White, Habib, and Hardisty, 2019). However, formulating a suitable message is crucial for pro-environmental consumption behaviour.

Past research predominantly used message framing for assessing communication effectiveness on lodging and travel behaviour (e.g., Kapoor, Balaji, and Jiang, 2021; Zanon and Teichmann, 2016). Message framing is a fertile topic for sustainable consumption in tourism. For example, Wehrli *et al.* (2017) suggest emotional messaging rather than rational messaging for promoting sustainable tourism behaviour through holiday brochures. Hardeman, Font, and Nawijn (2017) revealed the effectiveness of self-benefit messaging in stimulating consumers’ pro-sustainability behaviour. More recently, Su and Li (2022) confirmed the positive effect of the message framing (i.e., gain or loss) on the consumer’s attitudes towards hotels’ eco-friendly advertising. However, to the best of our knowledge, no study has applied diagnostic, prognostic, and motivational message framing for assessing the effectiveness of environmental sustainability communication on tourist behaviour.

Hence, the aim of this research is to investigate the effect of message framing (i.e., prognostic, diagnostic, and motivational) on the tourist’s pro-environmental behaviour in destinations. Accordingly, the current study offers three contributions to the sustainability

literature. Firstly, the research investigates the causal impact of message framing on the tourist's pro-environmental behaviour using experimental methods. This is important because there has been a paucity of research that investigates the effectiveness of environmental sustainability communication from a tourist's point of view. Environmental sustainability is a social movement, but research on tourist behaviour and destinations is limited. Secondly, the study investigates the underlying mechanisms behind message framing and the tourists' pro-environmental behaviour. Hence, the study investigates whether message framing has a direct or indirect effect on the tourist's pro-environmental behaviour through collective efficacy and destination brand identification and whether collectivism moderates these relationships.

2. Conceptual Background and Research Hypotheses

Message Framing

Message framing is a communication strategy that involves words, phrases, images, and sentences when delivering information about a specific issue or an event to a target audience (Chong and Druckman, 2007; Yoon *et al.*, 2019). Diagnostic, prognostic, and motivational framing was originally developed by Snow and Benford (1988) to elucidate conceptual aspects and collective action. The foremost points out an event or a condition as problematic or requires amelioration and, as a result, entitles blameworthy agents, whereas prognostic framing proposes potential solutions to the identified problematic situation by developing specific strategies and tactics (Cress and Snow, 2000). Motivational framing entails developing a rationale for engaging in corrective action (Hunt, Benford, and Snow, 1994).

These core frames can help to understand the dynamics of social movements (Benford and Snow, 2000). Hence, they have been applied to scrutinise sustainability discourses and movements (Palgan, Zvolaska, and Mont, 2017). For example, Reynard, Collins, and

Shirgaokar (2021) revealed that municipal authorities in Canada apply diagnostic (e.g., The Growing City) and prognostic (e.g., Better City for All) message framing to mitigate climate change and reduce carbon emissions. Furthermore, organisations develop communication messages to influence people's attitudes and behaviours towards environmental sustainability issues. Vu *et al.* (2021) found that non-governmental organisations mostly use diagnostic messaging rather than prognostic and motivational messages to raise public awareness about climate change issues on Facebook. Overton (2018) revealed that, compared to diagnostic and prognostic message framing, motivational messages are more useful to provoke public action. That is, when the target audiences are informed about environmental issues through motivational messages, they are more likely to take action. Hence, we propose that:

H1. Motivational and prognostic message framing are more influential in enhancing the tourist's pro-environmental behaviour intentions than diagnostic message framing.

Mediating Role of Collective Efficacy and Destination Brand Identification

Collective efficacy grounded in social cognitive theory refers to "a group's shared belief in its collective capabilities to organise and execute the courses of action required to produce given levels of achievement" (Bandura, 1997, p. 447). Diagnostic messages are not likely to reduce perceptions of limits or increase involvement with the problem since they are primarily problem-focused rather than solution-focused (Overton, 2018). Although prognostic message framing focuses on the outcomes of collective action and emphasises attainable positive outcomes, it may be overly optimistic, leading to disillusionment or disappointment (Benford and Snow, 2000). Hence, this type of framing builds individuals' beliefs about the conjoint capability of a specific action specific to a particular task. Meanwhile, motivational framing

focuses on the benefits of collective action and emphasises the group's strengths and resources. People's beliefs about a group's ability to attain specific goals influence perceptions and behaviours (Babicky and Seebauer, 2020). Therefore, it would be most effective at boosting individuals' confidence to collaborate towards a common action (Cress and Snow, 2000). Past research indicated that collective efficacy can motivate people's intentions for pro-environmental behaviour (Leonard and Leviston, 2016; Jugert *et al.*, 2016).

Social movements can deploy framing facilities to accomplish certain public goals (Benford and Snow, 2000). Framing facilities may be linked to personal identity and social identity. Hunt *et al.* (1994) posit that individual and social identities can facilitate social movements and collective actions. As diagnostic message framing designates responsible agents for the problem, it entails casting others into the roles of wrongdoers or antagonists. Diagnostic and prognostic framing do not automatically lead to collective action. Motivational framing comprises the social construction and confirmation of the motives and identities of protagonists who advocate a particular idea (i.e., sustainability). For example, destination brands may deliver motivational message framing to (re)construct the tourists' personal identities and commitment to sustainable behaviour.

Social identification research in management and marketing has provided potential explanations and motivations for why people are associated with organisations or brands (Curras-Perez, Bigne-Alcaniz, and Alvarado-Herrera, 2009). Individuals satisfy social identity values when they have a sense of connection or belonging to brands (Kreiner and Ashforth, 2004). Stokburger-Sauer *et al.* (2012) show that customer brand identity predicts brand loyalty and brand advocacy (i.e., intention to recommend) behaviour. Ekinici *et al.* (2013) reveal that tourists' identification with a destination brand leads to higher behavioural intentions to visit a destination. Hibbert *et al.* (2013) report that personal identity affects travel decisions and attitudes towards environmental issues. Hence, we expect that:

H2. Collective efficacy mediates the effect of message framing on the tourist' intentions of pro-environmental behavior.

H3. Destination brand identification mediates the effect of message framing on the tourist' intentions of pro-environmental behavior.

Moderating Role of Collectivism

According to Hofstede's (2001) cultural theory, people in individualistic societies are expected to care for themselves and their immediate families only, while in collectivist societies, people view themselves as members of larger groups, including extended family members, and are expected to take responsibility for caring for each. Tascioglu, Eastman, and Iyer (2017) show that collectivists care more about environmental and societal issues than individualists. Wang *et al.* (2022) state that social norms and collectivism work together to influence tourists' environmentally friendly behaviour.

Based on previous findings, it can be said that sustainability communication becomes more effective when it targets those who hold collectivist values. Acampora, Preziosi, Lucchetti, and Merli (2022) state that these individuals have a positive mindset to tackle environmental issues. In this regard, prognostic and motivational frames highlight the group's capability of tackling a certain problem as opposed to diagnostic ones that only emphasise the problem itself. Accordingly, we expect that collectivists tend to behave in a more environmentally responsible manner, have higher collective efficacy beliefs, and have greater identification with destinations when they are exposed to messages that a certain environmental problem can be sorted out with the involvement of all as a group. Thus, we propose that:

H4a-H4c: Collectivism moderates the relationship between message framing and the tourist's intentions of pro-environmental behaviour (H4a), collective efficacy (H4b), and destination brand identification (H4c).

3. Method

This study employed multi-categorical (message framing: diagnostic, prognostic, and motivational) between-subject design experiments. We created scenarios for diagnostic, prognostic, and motivational framing. The pre-test results have confirmed the suitability of the manipulations. The study will test the proposed hypotheses via online experiments. We have adopted scales from previous research. Having read the relevant scenarios, participants evaluated pro-environmental behaviour with three items (*Liu et al.*, 2020), collective efficacy with five items (Doran, Hanns, and Larsen, 2017), brand identification with three items (*Ekinici et al.*, 2013), and collectivism with three items (Webb, Mohr, and Harris, 2017).

We will recruit participants among British residents who are aged at least 18 years old and have a social media account (i.e., Instagram, Facebook) from Prolific, an online crowdsourcing platform suitable for social scientific studies (Palan & Schitter, 2018). Until the conference time, we will be conducting the pre-test to see whether scenarios are perceived as intended or not and whether measurements are understandable. The study will utilise the PROCESS Macro for SPSS (Model 85) with 5000 bootstrap samples for the analysis of the moderated serial mediator model (Hayes, 2018).

4. Conclusion

The current study is the first attempt to apply diagnostic, prognostic, and motivational framing in the context of destination sustainability. It also tests whether such frames could

stimulate collective efficacy and destination brand identification that lead to higher intentions towards pro-environmental behaviour. The research addresses the current challenges of destination marketing by finding the most appealing messages to promote their sustainability campaigns and offers managerial implications for private and public organisations.

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